

## FULL-DUPLEX OPTICAL COMMUNICATION SYSTEM

### ABSTRACT OF THE DISCLOSURE

A method of full-duplex electro-magnetic communication wherein a pair of data modulation  
5 formats are selected for the forward and return data links respectively such that the forward data electro-  
magnetic beam serves as a carrier for the return data. A method of encoding optical information is used  
wherein right-hand and left-hand circular polarizations are assigned to optical information to represent  
binary states. An application for an earth to low earth orbit optical communications system is presented  
which implements the full-duplex communication and circular polarization keying modulation format.

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